

## REMARKS/ARGUMENTS

Reconsideration of the above-identified application respectfully requested.

### Claim Amendments

The inadvertent period is eliminated in Claim 22. Additionally, the list of cytotoxic agents listed in claim 31 has been added in its entirety to claim 22. No new matter is added and entry of these claim amendments respectfully is requested.

### The Claim Rejections

Claims 22, 26-28, and 30, and 32-34 stand rejected under the provisions of 33 U.S.C. § 102(b) as being anticipated by Bayer Product Information Sheet. Claims 22, 26-28, and 30, and 32-34 also stand rejected under the provisions of 33 U.S.C. § 103(a) as obvious over DuPont (U.S. Patent No. 6,855,338) in view of the Pre-Brief Conference held on July 10, 2008.

Applicants respectfully traverse the rejection of the claims and grounds therefor.

### Argument

Bayer is cited as teaching suramin provided in vials of 1 g where a pharmaceutical carrier is reasonably present in the vial. However, amended claim 22 recites not only the presence of suramin and a pharmaceutical carrier, but also a cytotoxic agent selected from a defined list. Bayer does not teach a cytotoxic agent or the directions for administration of the combination of suramin and a cytotoxic agent. Thus, the instructions recited do relate specifically and only to the recited combination of ingredients listed in the claims and now add patentable weight to the claims. Bayer, then, does not anticipate the claims.

DuPont discloses an anti-tumor composition composed of an anti-neoplastic agent and shark cartilage. One of the listed anti-angiogenic compositions is suramin. Not disclosed by DuPont is the fact that use of therapeutic (high) doses of suramin yield concentrations between about 300 to about 650  $\mu$ M, which do not enhance the efficacy of chemotherapeutics and only enhanced the toxicity of chemotherapy. In fact, it was Applicants showed that only low doses of suramin, which yield circulating concentrations of below about 200  $\mu$ M (e.g., between about 10 to about 50  $\mu$ M plasma concentrations) when a chemotherapeutic agent (e.g., paclitaxel) was present in the plasma at therapeutically significant levels, enhanced the efficacy of chemotherapy in tumor-bearing animals. Applicants' discovery is diametrically the opposite of the teachings of DuPont.

With respect to "print instructions", it is material error to ignore printed instructions in applying Section 103(a), even if the printed matter does not constitute patentable subject

matter. *In re Gulack*, 217 USPQ 401 (Fed. Cir. 1983). More recently, the same Court stated that printed matter has patentable significance if there exists any new and unobvious functional relationship between the printed matter and the composition of the kit. *In re Ngai*, 35 USPQ2d 1384 (Fed. Cir. 2004). The MPEP expressly recognizes the vitality of the *Gulack* decision at MPEP § 2112.01 by stating, *inter alia*: “III. ... [T]he critical question is whether there exists any new and unobvious functional relationship between the printed matter and the substrate.”

Applying that Court and MPEP sanctioned standard to the kit subject matter of claim 22, the printed instructions provide a new and unobvious functional relationship between suramin and the recited cytotoxic agent. That is, the printed instructions inform the user that a patient must have a low dose of circulating suramin (< 200  $\mu$ M) at which time a chemotherapeutic is administered to the patient for enhancement of the chemotherapeutic activity. Moreover, the printed instructions also provide an algorithm for the physician to use in determining the proper dose of suramin for each patient based on criteria not taught by DuPont or any other reference. Such criteria include the following elements from claim 22:

- (b1) determining the squared value of the body surface area (BSA) of said patient;
- (b2) determining the time elapsed, in days, since the initiation of the last suramin treatment; and
- (b3) calculating the dose of low dose suramin using a nomogram that shows the dose according to the parameters of squared value of body surface, and elapsed days since last suramin treatment.

All other claims include the limitations of claim 22. Claim 26 further discloses a particular cytotoxic agent. Claims 27 and 28 further disclose particular ranges of circulating suramin. A nomogram is recited in claim 30. Claim 32 further discloses a time period over which the suramin is administered to the patient. Claim 33 also discloses a time period over which particular amounts of suramin are administered to the patient. Finally, claim 34 further discloses another treatment regimen.

None of these functional relationships between suramin, the cytotoxic agent, and the printed instructions are disclosed in the art.

The printed instructions, then, satisfy the *Gulack* test as approved of in the MPEP and cannot be ignored by the Examiner. It is noted finally that even Ngai's ultimately issued patent contained a “kit” claim analogous to amended claim 22 submitted herewith.

Conclusion

In view of the claim amendments and remarks submitted herewith, allowance of the claims and passage to issue of this application respectfully is requested. If an allowance of the claims is not forthcoming, please enter this amendment for purposes of appeal.

Respectfully submitted,



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